

REMARKS


This submission is in response to the Official Action dated July 16, 2003. Claims 1-46, 48, 51-55, 62 and 64 have been canceled, without prejudice or disclaimer. Claims 47, 49, 50 and 56-58 have been allowed. New claims 66-68 have been added. Claims 47, 48, 56, 58, 61, and 63 have been amended. Claims 47, 49, 50, 56-61, 63 and 65-68 are pending and at issue. Entry of this amendment is respectfully requested.

Claims 47, 48, 56, 59, and 61 have been amended in matters of formal claim language. Specifically, claims 56 and 58 have each been amended to recite an isolated nucleic acid encoding a mutant of SEQ ID NO:14, and claim 61 has been amended to recite an isolated cell producing a mutant of SEQ ID NO:14.

Claim 63 has been amended to recite an isolated cell comprising the vector of (allowed) claim 50. This is supported by the specification at, e.g., page 36, lines 7-24 (Example 1).

New claims 66-68 are directed to a vector comprising the nucleic acid of (allowed) claim 58, an isolated cell transfected with said vector, and a method for producing a mutant of SEQ ID NO:14 comprising culturing said cell. These claims are all supported by the specification as filed at, e.g., page 5, lines 5-12, and page 43, line 24 to page 44, line 12 (Example 2).

No new matter has been added by way of this amendment. Each objection and rejection set forth in the office action is addressed below.

{M:\1034\1F812\00053765.DOC  }

Oath / Declaration

The Examiner considers the Declaration defective because it does not refer to the previously filed preliminary amendment.


A Supplemental Declaration listing all preliminary amendments and amendments filed in this application accompanies this submission. It is therefore believed that this objection has been overcome and should be withdrawn.

Priority

The Examiner acknowledges priority of the instant application to provisional application 60/173,826, filed December 30, 1999, but continues to allege that SEQ ID NO:14 is not entitled to the priority date of provisional application 60/127,452, filed April 1, 1999, because SEQ ID NO:2 in the 60/127,452 application comprised 23 additional amino acid residues.

The applicants respectfully reiterate that this objection is in error. To clarify this point, claim 47 as amended is drawn to a nucleic acid encoding a human PAMP protein comprising the sequence of SEQ ID NO:14. SEQ ID NO:2 in provisional application 60/127,452, filed April 1, 1999 is a sequence comprising the sequence of SEQ ID NO:14. Full priority of the pending claims to April 1, 1999 is thereby established.

Finally, the Examiner has cited no reference that is available on the basis of the priority date of this application.

{M:\1034\1F812\00053765.DOC  }


For the above reasons, reconsideration and withdrawal of the Examiner's objection to the priority claim is respectfully requested.

Written Description

The Examiner has maintained the rejection of claims 52, 54, 60 and 61 for alleged lack of written description in the specification.

Claims 52 and 54 have been cancelled, without prejudice or disclaimer. It is thereby believed that the rejection as applied to these claims is moot.

The official action states that claims "...60, 61 are included in this rejection because they are drawn to products and methods which require mutant variant PAMP sequences." It is believed that claims 60 and 61 were erroneously included in this rejection since they both depend, directly or indirectly, from allowed claim 59. Claim 59 is drawn to a vector comprising an isolated nucleic acid encoding a mutant of SEQ ID NO:14, wherein the mutant has a mutation in an amino acid residue corresponding to an amino acid selected from the group consisting of C230, D336, Y337, and both D336 and Y337. Since the vector and the nucleic acid encoding the mutant protein complies with the written description requirement, the cell of claim 60, comprising the same vector, and the method recited in claim 61 to produce the same mutant protein by culturing the same cell, also comply with the written description requirement.

{M:\1034\1F812\00053765.DOC  }

For all of the above reasons, reconsideration and withdrawal of this rejection is respectfully requested.

Enablement

The Examiner has maintained the rejection of claims 52, 54, 60 and 61 for alleged lack of enablement by the specification.

Claims 52 and 54 have been cancelled, without prejudice or disclaimer. It is thereby believed that the rejection as applied to these claims is moot.

The official action argues that "...it is maintained that this is only a small fraction of the enormous number of species encompassed by the claims". It is believed, however, that this rejection of 60 and 61 is in error. Claims 60 and 61 both depend, directly or indirectly, from allowed claim 59. Allowed claim 59 depends from allowed claim 56, and is drawn to a vector comprising an isolated nucleic acid encoding a mutant of SEQ ID NO:14, wherein the mutant has a mutation in an amino acid residue corresponding to an amino acid selected from the group consisting of C230, D336, Y337, and both D336 and Y337. Since the vector and the nucleic acid encoding the mutant protein are enabled, the cell of claim 60, comprising the same vector, and the method recited in claim 61 to produce the same mutant protein by culturing the same cell, are also enabled.

{M:\1034\1F812\00053765.DOC 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 }

For all of the above reasons, reconsideration and withdrawal of this rejection is respectfully requested.

Anticipation

Claim 52 stands rejected as anticipated by GenBank Accession No. D87442.


As claim 52 has been cancelled, without prejudice or disclaimer, it is respectfully solicited that this rejection is moot. It is hereby made of record, however, that the argument referred in the paragraph bridging pages 13 and 14 in the instant office action, *i.e.*, that the D87442 reference does not provide an enabling disclosure because it is out of frame, was solely based on the following analysis of the Examiner reported in the Office Action dated January 30, 2003 (paper number 19; page 21, first paragraph):

... it appears that the coding sequence was not in frame and thus not operatively linked to the promoter sequences in pBluescript.

The Examiner's assessment was adopted in the previous response.¹

It nevertheless remains undisputed that the pending claims are not anticipated by this reference.

¹ The response filed April 30, 2003 stated (page 21, last paragraph): "The Examiner has noted on page 21 of the Office Action that the coding sequence was not in frame. Thus, the D87442 vector construct could not encode, and thus does not enable, a sequence having 90% sequence identity to SEQ ID NO:14 and being capable of interacting with a presenilin."

{M:\1034\1F812\00053765.DOC  }

*

*

*

In view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.


Respectfully submitted,



Anna Löqvist, Ph.D.

Limited Recognition Under 37 C.F.R.
10.9(b) (see attached)
Representative for Applicants

DARBY & DARBY, P.C.
Post Office Box 5257
New York, NY 10150-5257
Phone (212) 527-7700

{M:\1034\1F812\00053765.DOC  }

Serial No. 09/541,094
Response to Office Action dated July 16, 2003

Docket No. 01034/100F812-US2
Page 11